### MONTHLY WEATHER REVIEW

Table 2.—Data furnished by the Canadian Meteorological Service, April 1936

|   |  |   | Pressure  |                          | Temperature of the air                    |                              |   |   |                            |                               | Precipitation                             |                             |  |
|---|--|---|---|--------------------------|---|------------------------------|---|---|----------------------------|-------------------------------|---|-----------------------------|--|
| Station   | Altitude<br>above<br>mean<br>sea level,<br>Jan. 1,<br>1919 | Station<br>reduced<br>to mean<br>of 24<br>hours | Sea level<br>reduced<br>to mean<br>of 24<br>hours | Departure from normal    | Mean<br>Max. +<br>mean<br>min. ÷2         | Departure from normal        | Mean<br>maxi-<br>mum                      | Mean<br>mini-<br>mum                      | Highest                    | Lowest                        | Total                                     | Departure from normal       | Total<br>snowfall                      |
| Come Date Nantaundland  | Ft. 99   | In.   | In.   | In.                      | ° F.                                      | ° F.                         | ° F.                                      | ° F.                                      | ° F.                       | • F.                          | In.                                       | In.                         | In.                                    |
| Cape Race, Newfoundland. Sydney, Cape Breton Island Halifax, Nova Scotia. Yarmouth, Nova Scotia. Charlottetown, Prince Edward Island. | 48<br>88<br>65<br>38                                       | 29, 83<br>29, 66<br>29, 84<br>29, 81            | 29. 88<br>29. 77<br>29. 91<br>29. 85              | -0.01<br>19<br>05<br>05  | 39. 9<br>39. 8<br>40. 0<br>38. 2          | +4.9<br>+2.0<br>+1.1<br>+3.0 | 48. 5<br>46. 0<br>44. 9<br>44. 9          | 31. 3<br>33. 5<br>35. 2<br>31. 5          | 65<br>59<br>52<br>63       | 22<br>26<br>29<br>20          | 6. 19<br>4. 79<br>3. 51<br>3. 07          | +2.34<br>+.61<br>31<br>+.42 | 5. 8<br>1. 5<br>4. 3<br>19. 5          |
| Chatham, New Brunswick Father Point, Quebec Quebec, Quebec Doucet, Quebec Montreal, Quebec  | 28<br>20<br>296<br>1, 236<br>187                           | 29. 78<br>29. 84<br>29. 57                      | 29. 81<br>29. 86<br>29. 90                        | 09<br>07<br>09           | 38. 0<br>35. 5<br>37. 7<br>25. 9          | +2.5<br>+2.3<br>+2.6         | 45, 9<br>40, 8<br>43, 8<br>37, 6          | 30. 2<br>30. 3<br>31. 7<br>14. 2          | 74<br>61<br>70<br>55       | 22<br>21<br>22<br>-20         | 2. 18<br>2. 44<br>5. 30<br>3. 57          | 45<br>+. 86<br>+3. 21       | 15. 2<br>9. 8<br>24. 3<br>24. 8        |
| Ottawa, Ontario   | 236<br>295<br>379<br>930<br>1, 244                         | 29. 68<br>29. 64<br>29. 58                      | 29. 95<br>29. 96<br>30. 00                        | 07<br>06<br>02           | 38. 8<br>39. 4<br>39. 6<br>27. 7<br>26. 0 | -1. 2<br>6<br>-1. 2          | 46. 1<br>45. 9<br>45. 8<br>36. 2<br>38. 1 | 31. 6<br>32. 9<br>33. 4<br>19. 3<br>13. 8 | 64<br>61<br>64<br>55<br>58 | 17<br>20<br>24<br>2<br>-17    | 4. 06<br>3. 17<br>3. 00<br>1. 60<br>1. 95 | +2.56<br>+1.38<br>+.63      | 4, 5<br>1, 6<br>1, 8<br>10, 4,<br>9, 9 |
| London, Ontario Southampton, Ontario Parry Sound, Ontario Port Arthur, Ontario Winnipeg, Manitoba                                     | 808<br>656<br>688<br>644<br>760                            | 29. 27<br>29. 26<br>29. 38<br>29. 24            | 30. 00<br>29. 98<br>30. 12<br>30. 11              | 03<br>06<br>+.09<br>+.09 | 38. 0<br>34. 8<br>35. 2<br>29. 1<br>29. 8 | -3.9<br>-2.4<br>-4.4<br>-6.1 | 45. 5<br>41. 4<br>40. 5<br>39. 5<br>40. 1 | 30. 6<br>28. 2<br>27. 9<br>18. 7<br>19. 6 | 65<br>66<br>60<br>54<br>65 | 17<br>14<br>6<br>-10<br>-16   | 3. 26<br>3. 26<br>1. 85<br>1. 95          | +1.46<br>06<br>+.23<br>61   | 6.8<br>9.0<br>8.2<br>.9                |
| Minnedosa, Manitoba   | 1, 690<br>860<br>2, 115<br>1, 759<br>2, 392                | 28. 23<br>27. 74<br>27. 45                      | 30. 10<br>30. 04<br>30. 02                        | +.09<br>+.05<br>+.06     | 29. 4<br>26. 6<br>30. 6<br>35. 2<br>37. 6 | -6. 6<br>-6. 8               | 40. 7<br>39. 4<br>41. 8<br>46. 4<br>49. 1 | 18. 2<br>13. 8<br>19. 4<br>23. 9<br>26. 2 | 69<br>64<br>72<br>76<br>82 | -15<br>-21<br>-13<br>-9<br>26 | . 47<br>1. 23<br>. 50<br>. 48<br>. 50     | 59<br>55<br>43              | 3.1<br>9.4<br>4.8<br>3.2<br>4.0        |
| Medicine Hat, Alberta<br>Calgary, Alberta<br>Banff, Alberta   | 2, 365<br>3, 540   | 27. 51<br>26. 32                                | 30. 02<br>30. 05                                  | +. 10<br>+. 15           | 40. 4<br>36. 9                            | -4.1<br>-2.7                 | 51. 2<br>48. 2                            | 29. 6<br>25. 7                            | 86<br>81                   | 0<br>-4                       | . 67<br>. 64                              | 07<br>. 00                  | 3.9<br>6.4                             |
| Prince Albert, Saskatchewan Battleford, Saskatchewan  | 4, 521<br>1, 450<br>1, 592                                 | 28. 47<br>28. 30                                | 30, 09<br>30, 08                                  | +.11<br>+.11             | 32. 2<br>33. 6                            | -3. 9<br>-3. 6               | 43. 0<br>45. 5                            | 21. 4<br>21. 6                            | 66<br>74                   | -12<br>-13                    | . 62<br>. 23                              | 21<br>24                    | 1. 6<br>1. 1                           |
| Edmonton, Alberta Kamloops, British Columbia Victoria, British Columbia Barkerville, British Columbia                                 | 2, 150<br>1, 262<br>230<br>4, 180                          | 27. 70<br>28. 70<br>29. 83                      | 30. 02<br>30. 00<br>30. 09                        | +. 13<br>+. 07<br>+. 08  | 35. 4<br>52. 0<br>49. 9                   | -4.5<br>+3.1<br>+3.1         | 46. 4<br>65. 4<br>56. 3                   | 24. 4<br>38. 7<br>43. 6                   | 76<br>86<br>67             | -13<br>15<br>32               | . 97<br>. 66<br>. 90                      | +.09<br>+.27<br>-1.47       | 8. 2<br>. 0<br>. 2                     |
| Estevan Point, British Columbia<br>Prince Rupert, British Columbia  | 20<br>170  |   |   |                          | 46. 6<br>42. 0                            |                              | 51. 8<br>49. 1                            | 41. 3<br>35. 0                            | 58<br>68                   | 26<br>22                      | 8. 92<br>6. 23                            |                             | 0.                                     |
| Hamilton, Bermuda 151   |  |   |   |                          |   |                              |   |   |                            |                               |   |                             |  |
| LATE REPORTS FOR MARCH 1936   |  |   |   |                          |   |                              |   |   |                            |                               |   |                             |  |
| Port Arthur, Ontario  | 644  | 29. 14  | 29. 87  | -0.18                    | 21.0                                      | +4.2                         | 29. 9                                     | 12. 0                                     | 45                         | -12                           | 0. 55                                     | -0. 42                      | 5.3                                    |

#### SEVERE LOCAL STORMS, APRIL 1936

[Compiled by Mary O. Souder from reports submitted by Weather Bureau officials]

[The table herewith contains such data as have been received concerning severe local storms that occured during the month. A revised list of tornadoes will appear in the Annual Report of the Chief of Bureau]

| Place   | Date | Time            | Width of path, yards | Loss<br>of<br>life | Value of<br>property<br>destroyed | Character of storm | Remarks   |
|---|------|-----------------|----------------------|--------------------|-----------------------------------|--------------------|---|
| Tignali, near, Georgia  | 1    | 8:30 p. m       |                      | 3                  |                                   | Tornado            | 5 persons injured; 11 houses, 5 barns, and a store demolished; numerous animals killed.   |
| Lincolnton, Ga., and vicinity                                 | 1    | 9 p. m          |                      | 0                  |                                   | do                 | 2 persons injured; 50 houses wrecked; the courthouse, church, and a hotel   |
| Gordo, Ala., vicinity of<br>Wills Valley, Ala                 | 1    | 11 p. m<br>p. m | 300                  | 1                  |                                   | 1                  | damaged. 5 persons injured; several buildings destroyed; path 1 mile long. Wills Creek overflowed its banks, some flooding resulting; 200 feet of road washed out.  |
| Hopkins County, Ky  | 1    |                 |                      |                    | \$15,000                          | Wind and hail      | Barns and small buildings unroofed or blown down; hail at Madisonville  |
| Concord, N. C   | 2    | 5:57 a, m       |                      |                    |                                   | Wind               | damaged windows and greenhouses.  2 persons injured; storm moved from northwest to southeast causing scattered damage; noise like a nearby passing freight train; trees fell toward southeast; path 5 miles long.   |
| Sasser, Ga  | 2    | 6 a. m          | 200-500              | 1                  | 3,000                             | Tornado            | Several persons injured: number of buildings wrecked.   |
| Leesburg, Ga  | 2    | 7 a. m          |                      | 1                  | 4, 300                            | do                 | 8 persons injured; property damaged.  |
| Leesburg, Ga<br>Greensboro, N. C                              | 2    | 7:12-7:20 p. m_ | 13-267               | 14                 | 2, 000, 000                       | do                 | damaged: path 7 miles long.   |
| Cordele, Ga   | 2    | 7:30 a. m       |                      | 23                 | 3, 000, 000                       | do                 | 500 persons injured; 287 buildings demolished, 165 damaged. This may be same tornado that previously passed through Sasser and Leesburg, Ga.  |
| Lodge, near S. C.   | 2    | 8:30 a. m.      | 80                   | 1                  | 1,000                             | do                 | Farmer killed by a falling tree in his yard; path 1 mile long.  |
| Mebane to Arcola, N. C., vicinity of.                         | 2    | 8-9:15 p. m     |                      | 1                  | 10, 000                           | do<br>do           | Continuation of the Greensboro tornado: appears to have passed 14 mile north of Mebane at 8 p. m., and was traced in an easterly direction for 6 miles; 4 persons injured; slight damage 3 miles north of Hillsboro; heavy cloud with a loud roar passed north of Arcola, a point 40 miles from Greensboro, at 9:15 p. m. |
| Cherry Lake, Fla  | 2    |                 |                      |                    | 5, 000                            | Thundersquall      |   |
| Aiken, S. C., and vicinity                                    | 2    |                 | l                    | <sup>'</sup>       | 2,000                             | Wind               |   |
| Hampton, Colleton, Barnwell,<br>and Allendale Counties, S. C. | 2    |                 |                      |                    | 5, 000                            | do                 |   |

<sup>&</sup>lt;sup>1</sup> Miles instead of yards.

# MONTHLY WEATHER REVIEW

### SEVERE LOCAL STORMS, APRIL 1936-Continued

| Place  | Date     | Time                                    | Width of path, yards | Loss<br>of<br>life | Value of property destroyed | Character of storm                     | Remarks   |
|--|----------|---|----------------------|--------------------|-----------------------------|--|---|
| Valentine, Nebr  | 3-4      | p. m                                    |                      |                    |                             | Dust                                   | A heavy deposit of yellow dust settled over the entire landscape turning the snow to mud color and approaching 16 inch in depth on sidewalks  |
| Izard County, Ark  | 5        | 2 p. m                                  | 400                  | 1                  | 40, 000                     | Tornado                                | 4 persons injured and property damaged; path narrow and 440 yards   |
| Nashville, Tenn  | 5        | 7:30-9:30 p. m                          |                      | <b>-</b> -         | 1,000                       | Thundersquall                          | long from southwest to northeast.<br>  Storm started with severe thunder at 7:30 p. m.; lightning interrupted<br>  power and light service; wind of 44 miles from the northwest; period   |
| Booneville, Miss.<br>Coffeeville-Tupelo, Miss., Red<br>Bay, Ala.                                 | 5<br>5   | 8:05 p. m<br>8:10 p. m                  | 440                  | 4 4                | 20,000                      | Tornadodo                              | of damaging winds less than 10 minutes.  12 persons injured; property loss; path 25 miles long, not continuous.  At Coffeeville, 7 persons injured; property damaged; path 18 to 20 miles long.   |
| Tupelo, Miss   | 5        | 8:55 p. m                               |                      | 216                | 3, 000, 000-<br>4, 000, 000 | do                                     | east: path 50 miles long.   |
| Red Bay to Elkwood, Ala  | 5        | <b></b>                                 | i                    | 6                  |                             | do                                     | a general northeasterly direction; amount of damage not estimated.  |
| Henderson and Jefferson<br>Countles, Ky.   | 5        |   |                      |                    | 25, 000                     | Hail, heavy rain,<br>and wind.         | Fruit crop and tobacco-plant beds, windows, and automobile tops dam aged; buildings unroofed and trees blown down; \$25,000 loss estimated from half alone.   |
| Gainesville and New Holland,   | 6        | 8:27-8:37 a. m                          |                      |                    | 13, 090, 000                | Tornadoes                              | 934 persons injured, not including over 700 who required first-ald treatment; 750 houses demolished and 254 badly damaged; 1,662 families registered for Red Cross aid. The first tornado struck on the campus of Brenau College at 8:27 a. m.; only minor damage occurred to the college buildings, but the trees on the campus were torn to pieces and the trunks thrown down in all directions; the course of destruction was narrow and extended nearly eastward through New Holland, then northeastward into the country. The other tornadoes came along if minutes later, 2 distinct funnel clouds appearing at once. These destroyed all but a few buildings in the business section. One course of destruction led into the city from the southwest, just to the west of the Atlanta highway; the other came in from nearly west along the Dawsonville highway. These 2 paths came together west of Grove Street, and an area 4 blocks in width was laid waste across the entire city beyond which separate courses of destruction again appeared. Where the tornadoes finally disappeared is uncertain, but Lavonia, Ga., nearly 40 miles from Gainesville, experienced a tornado about an hour later, and Anderson, S. C., had one the same day. The wreckage was astounding. In many places the debris was piled up 8 or 10 feet deep in the streets. 3-story buildines were flattened into 1. |
| Acworth, near, Ga  | 6        | 8:30 a. m                               |                      | 0                  |                             | do                                     | l saed  |
| Anderson, S. C., and vicinity  | 6        | 10:05 a. m                              | 400-500              | 1                  | 250, 000                    | do                                     | Man killed in his home by falling bricks; 30 persons injured, some seriously; more than 50 homes wrecked; trees uprooted; power and communication lines disrupted.  |
| Atlantic City, Absecon, and<br>Corbin City, N. J.  | 6        | 10:20-10:25 a. m                        |                      |                    |                             | Wind                                   | In Atlantic City extreme wind velocity of 65 miles per hour was registered;<br>a 2,000-pound brick-tile wall collapsed under pressure of high wind,<br>injuring a man and damaging an automobile; in Absecon a 2-story<br>barn blown down; at Corbin City windows were broken in 2 houses.  |
| Hardin, Wayne, Lewis, and  | 6        | 7:45 p. m                               | 100-1, 320           | 10                 | 202, 000                    | Tornado                                | 55 persons injured; more than 30 houses demolished and many damaged   |
| Maury Counties, Tenn. McNairy County, TennLawrence, Giles, Marshall, Lincoln, and Franklin Coun- | 6<br>6   | 8:30 p. m<br>9:15-11:30 p. m.           |                      | <u>-</u> -         | 2, 500<br>24, 000           | Thunderstorm Electrical and wind.      | leaving 250 persons homeless. Property damaged. 4 persons injured; 2 families marooned; property damaged.   |
| ties, Tenn.<br>Warren County, Tenn<br>Blackville, S. C., and vicin-                              | 6<br>6   | 11 p. m                                 | 200                  |                    | 20, 000<br>2, 000           | Wind<br>Severe winds                   | 3 persons injured and 15 made homeless; property damaged.<br>Trees uprooted and roofs damaged.  |
| ity.<br>Pennington, N. Mex   | 9        |   |                      |                    |                             | Wind                                   |   |
| Hardin County, Iowa<br>Orange and Marshalltown,  | 13<br>13 |   |                      |                    | 2, 500<br>2, 000            | do                                     | blown against them. Property damaged. Do.   |
| near, Iowa.<br>Lincoln, Nebr   | 13       | 1                                       |                      | 1                  |                             | do                                     | Small building overturned; plate glass windows and globes on street   |
| Ada, Minn., and vicinity   |          |   |                      | Į.                 |                             |  | lights broken.  High temperatures melted accumulated snows causing several rivers and creeks to overflow their banks in northern Minnesota; greatest damage at Ada where a hospital, 40 residences, and 6 buildings were  |
|  |          |   |                      |                    |                             |  | flooded; dam east of Ada washed out; many acres of farm lands and<br>several highways inundated; 2 bridges and part of railroad siding washed<br>out.   |
| Bedford County, Va<br>Midland, Tex   | 15<br>15 | 4-5 p. m<br>7:30 p. m                   | 1, 320               |                    | 1,000<br>25,000             | Thunderstorm<br>Tornado                | Damage to orchards and small buildings over a path several miles long.  |
| Norfolk, Va<br>Tuscola, Tex  | 15<br>15 | 7:30 p. m<br>9:25-10 p. m<br>10:30 p. m | 14                   | 0                  | 1, 200<br>800               | Tornado<br>Thunderstorm<br>Tornado     | Property damaged. Damage by lightning to soft drink plant. Property damaged.  |
| Norfolk, Va. Tuscola, Tex., and vicinity Fond du Lac and Milwaukee Counties, Wis.                | 15<br>15 | 10:30 p. m<br>p. m.                     |                      |                    | 1, 175<br>18, 000           | Tornado                                | Property damaged.  Do.  Squalls most severe in northeastern Dodge County and in the vicinity of Milwaukee and Waukesha. In Dodge and Fond du Lac Counties a number of small buildings were demolished; considerable damage to telephone lines; in Waukesha an ice house was unroofed and a large barn demolished; in Milwaukee windows were broken and a shelter shed of a school collapsed; 5 second-grade pupils were caught under the shed, their injuries necessitating hospital treatment; woman injured when blown against a pole, another slightly injured by flying glass from a broken window; small damage from hail  Storm had tornadic characteristics; dust entirely obscured the sky; garage demolished; outbuildings blown down.  Windows broken; roofs damaged; chickens killed; some loss to apricots crop; path 3 miles long.   |
| Glendale, Kans., and vicinity.   | 20       | 6 p. m                                  |                      |                    | 500                         | Wind and dust                          | from a broken window; small damage from hail.  Storm had tornadic characteristics: dust entirely obscured the sky:  |
| Caldwell, Idaho  | 23       | 4-5 p. m                                | 880                  |                    |                             | Hail                                   | garage demolished; outbuildings blown down. Windows broken; roofs damaged; chickens killed; some loss to apricots   |
| Miami and Opa Locks, Fla   | 26<br>26 | 5 p. m                                  | 1,320                |                    | 50, 000                     | Thunderstorm<br>and hail.              | crop; path 3 miles long.  Light to heavy hail over a small area northwest of the city in the vicinity of the municipal airport and Opa Locka; over a small area, 1,320 yards wide and 2½ miles in length, the fall was exceptionally heavy and unprecedented in this section; depth of fall in the open 4 or 5 inches and 2 feet deep when banked against the Goodyear airship hangar, remaining on the ground 3 days; property damaged including at least 41 residences in Opa Locka; many windows broken including at least 14 southwest side of the airship hangar; many automobiles and an airplane at the Naval Reserve base damaged.  11 persons injured; property damaged.  12 Heavy hailstones caused much damage to growing crops and fruit trees; several houses unroofed; amount of damage not estimated.  |
| Tracy, Tex   | 27       | 2 a. m                                  | <b>-</b>             | 2                  |                             | Tornado                                | plane at the Navai Reserve base damaged.  Il persons injured; property damaged.   |
| Tracy, Tex<br>Holyoke, Colo<br>Bush, La  | 27       | 6:30 p. m<br>p. m                       | <sup>1</sup> 10      |                    | 1, 500                      | Tornado<br>Heavy hail<br>Wind and hail | Considerable damage to vegetable gardens.<br>Heavy hailstones caused much damage to growing crops and fruit trees;<br>several houses unroofed; amount of damage not estimated.  |
| Haxtun, Colo   | 27       |   |                      | l                  |                             | Heavy hail                             | Loss to small grain.  |

<sup>1</sup> Miles instead of yards.

# MONTHLY WEATHER REVIEW

### SEVERE LOCAL STORMS, APRIL 1936-Continued

|   | <u> </u>                         | 1                       | <u> </u>             | Γ                  | 1                                 |  | 1  |
|---|----------------------------------|-------------------------|----------------------|--------------------|-----------------------------------|--|--|
| Place   | Date                             | Time                    | Width of path, yards | Loss<br>of<br>life | Value of<br>property<br>destroyed | Character of<br>storm                                | Remarks  |
| Montgomery, Ill   | 27                               |                         |                      |                    | 8, 750                            | Wind   | 4 persons slightly injured; property damaged.  |
| Cuero, Tex  |                                  | 2 a. m                  | 1 3                  |                    |                                   | do   | 3 persons injured.   |
| Fort Bend County, Tex   | 28<br>28<br>28<br>28<br>28<br>28 | do                      |                      |                    | 5,000                             | do   | 5 persons injured.   |
| Wharton County, Tex   | 28                               | 3 a. m                  |                      | 2                  | 2,000                             | do   | 7 persons injured; storm had tornadic characteristics.   |
| Winnie to Orangefield, Tex  | 28                               | 4:30-6 a. m<br>5-8 a. m |                      |                    |                                   | do   | 2 persons injured.   |
| Webster and Nuckolls Coun-<br>ties, Nebr., southern por-<br>tions.                                      | 20                               | 5-8 а. ш                |                      |                    | 15,000                            | Hail   | Damage to greenhouses, roofs, and windows.   |
| York and Butler Counties,<br>Nebr.  | 28                               | Noon                    |                      |                    | 1,000                             | do   | • • •  |
| Edgerly, Hathaway, Jennings, Plaucheville, and Bayou Jacque, La.  | 28                               | a. m                    |                      |                    | 1,000                             | Squalls  | Do.  |
| Galveston, Tex  | 28                               | do                      |                      |                    |                                   | Thundersquall  | In the school park a wood and steel grandstand, 240 feet in length, was blown to the ground and the steel supports badly bent; 6 small residences, supported on piling, were toppled over toward the north; a board fence 10 feet high surrounding the athletic field undamaged; large oak tree uprooted fell toward the north.  |
| Lincoln, Nebr   | 28                               | 2-2:30 p. m             | 333                  |                    | 5,000                             | Hail   | Damage to windows and roofs.   |
| Fort Wayne, Ind   | 28                               | 1                       | 1                    |                    | 1                                 | Heavy hail   | ing.   |
| Riverton, near, and Manson,<br>Iowa.  | 28                               |                         | i                    | 1                  |                                   | Thundersquall and hall.                              | Gardens and trees damaged by hail in Riverton; in Manson an empty circus tent blown over.  |
| Braddyville, Iowa   | 29<br>29-30                      | Midnight                |                      |                    | 10,000                            | Hall and wind<br>Thunderstorm                        | Garage wrecked; windows broken; telephone lines down. Number of barns unroofed; small buildings and silos wrecked; some  |
| Minn.<br>Lyons and Richland, Iowa   | 30                               | 3:15 a. m               |                      |                    | 1                                 | Wind and hail  | livestock and much poultry perished; some damage by lightning. Sheds and several windmills blown down; several sheep killed; consider-   |
| Rice, Dakota, Ramsey, and<br>Washington Counties, Minn.   | 30                               | 7:30-9 a. m             |                      |                    |                                   | Thundersquall  | able damage reported.  Number of buildings moved from their foundations; roofs lifted; windows blown in; poles and wires down; boathouses wrecked; tree uprooted.  |
| Columbia, Ind   | 30                               | 3–4 p. m<br>3–5:30 p. m |                      | 0 2                |                                   | Tornado  | Greatest damage in St. Paul and vicinity. Property damaged; path short.  |
| Clay, Dickinson, and Emmet Counties, Iowa.  Martin, Faribault, and Blue                                 | 30                               | 5:30-6 p. m             | 1 1-2                | 3                  | 850,000                           | do   | destroyed and 70 badly damaged. Storm started as a windstorm in Sheldon, O'Brien County, at 2 p. m. At 3 p. m. the tornado made itx first appearance in the extreme northwest portion of Waterford, Clay County, where 1 person was killed. 8 houses destroyed and a number of others badly damaged. Near Milford 2 funnel clouds were observed and a waterspout over west Lake Okobji also reported. Just after this the storm lifted, although heavy hali fell along the path to the northeast, with some stones measuring 8 inches in circumference. The next destruction occurred in Estherville. Emmet County, at 4:17 p. m. Because of the short lapse of time, it is believed that this was a new storm developing in advance of the original tornado, which followed along a short time later. The first storm passed over the northern part of the city, wrecked or badly damaged 12 homes, blew down power and telephone lines, and uprooted trees. The hospital was damaged, making care of the injured difficult. After this storm had struck Estherville a second one appeared and passed along the southern edge of the city, destroying hundreds of trees and tearing out 800 feet of railroad track. It is believed the second storm was the redevelopment of the Clay-Dickinson County fornado. After passing Estherville the paths of the 2 storms followed somewhat erratic but generally parallel courses across Center Township, Joined for a short distance, then separated again to pass on opposite sides of Dolliver. The paths once more united and the storms passed into Minnesota, east of Tuttile Lake, about 5:30 p. m.; path of storms 60 miles long.  Tornado originated near Sheldon, in northwestern Iowa, entered Minne- |
| Earth Counties, Minn.   |                                  |                         |                      |                    | 330, 333                          |  | sota in the vicinity Tenhassen, south-central Martin County. Storm moved northeastward into Faribault County and was last reported near Pleasant Prairie shortly after 6 p.m. Greatest destruction in Blue Earth, Faribault County; about 300 buildings demolished or badly damaged; silos and windmills wrecked; trees uprooted; poles and wires down; farm machinery damaged; 20 persons injured; much livestock and poultry perished; path of storm 25 miles long; damage in Martin County \$500,000, in Faribault and Blue Earth Counties \$350,000.   |
| Union, Iowa<br>Preston, Minn., and vicinity   | 30<br>30                         | 6 p. m<br>8 p. m        | 110                  | 0                  | 25, 000                           | Tornado and hail.<br>Tornado                         | Barn, a number of small buildings, and trees destroyed; path 1 mile long.<br>Number of outbuildings wrecked; many trees uprooted; path 880 yards   |
| Frankville, Iowa<br>Spring Valley and Perry, Iowa<br>Winona, Fillmore, and Hous-<br>ton Counties, Iowa. | 30<br>30<br>30                   | 9 p. mdop. m            | 33-333               | <br>0<br>          | 1, 000<br>3, 00°)<br>566, 000     | Wind and hail<br>Tornado and hail.<br>Rain and flood | Long stretches of railroad track, bridges, culverts, and dams washed out; highways damaged; creosote block pavements buckled; basements flooded; much cordwood washed away; some livestock and much poultry drowned; considerable damage to prospective crops; rock-   |
| Varina, Iowa  | 30<br>30<br>30                   |                         |                      |                    | 18, 000<br>10, 000                | Electrical   | slides blocked highway traffic. Grain elevator destroyed by fire after being struck by lightning. Bridge washed away, 2 others damaged; highways inundated. Communication and power lines damaged and poles down; 2 farm buildings in Canton moved from their foundations.   |

<sup>&</sup>lt;sup>1</sup> Miles instead of yards.